

file copy

09/744,603

FULL ESTIMATED COST 148.26 148.47

FILE 'CAPLUS' ENTERED AT 18:34:56 ON 04 NOV 2002
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FILE COVERS 1907 - 4 Nov 2002 VOL 137 ISS 19
FILE LAST UPDATED: 3 Nov 2002 (20021103/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

CAS roles have been modified effective December 16, 2001. Please check your SDI profiles to see if they need to be revised. For information on CAS roles, enter HELP ROLES at an arrow prompt or use the CAS Roles thesaurus (/RL field) in this file.

=> s 115
L16 2 L15

=> d 116 1-2 ibib abs hitstr

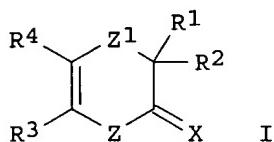
L16 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1999:640847 CAPLUS
DOCUMENT NUMBER: 131:257572
TITLE: Preparation of benzoxazinones and -thiazinones as serine protease inhibitors
INVENTOR(S): Berryman, Kent Alan; Downing, Dennis Michael; Dudley, Danette Andrea; Edmunds, Jeremy John; Narasimhan, Lakshmi Sourirajan; Rapundalo, Stephen Taras
PATENT ASSIGNEE(S): Warner-Lambert Company, USA
SOURCE: PCT Int. Appl., 175 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9950257	A1	19991007	WO 1998-US26708	19981215
W: AL, AU, BA, BB, BG, BR, CA, CN, CU, CZ, EE, GE, HR, HU, ID, IL, IS, JP, KP, KR, LC, LK, LR, LT, LV, MG, MK, MN, MX, NO, NZ, PL, RO, SG, SI, SK, SL, TR, TT, UA, US, UZ, VN, YU, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
CA 2319551	AA	19991007	CA 1998-2319551	19981215
AU 9919183	A1	19991018	AU 1999-19183	19981215

09/744,603

BR 9815784	A 20001121	BR 1998-15784	19981215
EP 1068191	A1 20010117	EP 1998-963965	19981215
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO			
JP 2002509925	T2 20020402	JP 2000-541161	19981215
ZA 9902445	A 19991001	ZA 1999-2445	19990330
NO 2000004698	A 20000920	NO 2000-4698	20000920
PRIORITY APPLN. INFO.:		US 1998-80142P	P 19980331
		WO 1998-US26708	W 19981215

OTHER SOURCE(S): MARPAT 131:257572
GI

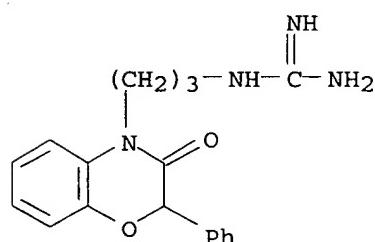


AB Title compds. [I; R1 = cycloalkyl(alkyl), heterocyclyl(alkyl), aryl(alkyl), etc.; R2 = H or alkyl; R3R4 = (un)substituted CH:CHCH:CH, -N:CHCH:CH, -CH:NCH:CH, etc.; X = O, S, NH; Z = Z2Z3R5; R5 = H, (un)substituted (heteroatom-interrupted) alkyl or -cycloalkyl(alkyl); Z1 = O, SOO-2, OCH2, SCH2, etc.; Z2 = bond or (heteroatom-interrupted) (cyclo)alkylene; Z3 = bond, (un)substituted heterocyclene, -arylene] were prep'd. Thus, 4-(MeO)C6H4CH2CO2Me was .alpha.-brominated and the product etherified by 2-(O2N)C6H4OH to give, after reductive cyclization, I [R1 = C6H4(OMe)-4, R2 = H, R3R4 = CH:CHCH:CH, X = Z1 = O] (II; Z = NH) which was N-alkylated by Br(CH2)Br and the product aminated by cis-2,6-dimethylpiperidine to give II [Z = N(CH2)5R5, R5 = cis-2,6-dimethyl-1-piperidinyl]. Data for biol. activity of I were given.

IT 244620-11-9P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prep'n. of benzoxazinones and -thiazinones as serine protease inhibitors)

RN 244620-11-9 CAPLUS

CN Guanidine, [3-(2,3-dihydro-3-oxo-2-phenyl-4H-1,4-benzoxazin-4-yl)propyl]- (9CI) (CA INDEX NAME)



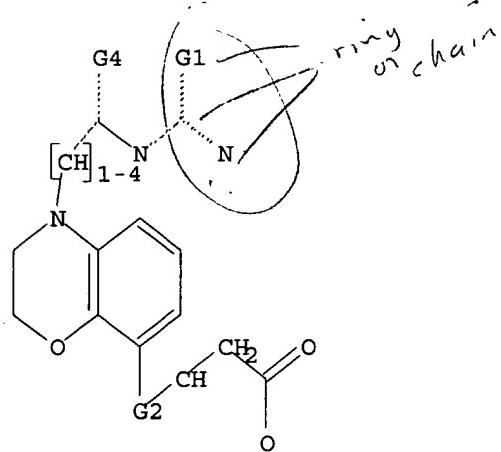
REFERENCE COUNT: 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L16 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1963:435587 CAPLUS

09/744,603

L5

STR



$G_1 \text{ O}, \text{N}$

$G_2 \text{ CH}_2, \text{O}, \text{S}, \text{N}$

$G_3 \text{ C}, \text{Cy}$

$G_4 \text{ H}, \text{O}$

Structure attributes must be viewed using STN Express query preparation.

=> s 15

SAMPLE SEARCH INITIATED 18:26:28 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 0 TO ITERATE

100.0% PROCESSED 0 ITERATIONS
SEARCH TIME: 00.00.01

0 ANSWERS

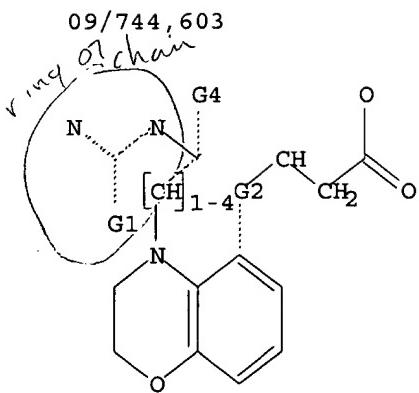
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BATCH **COMPLETE**
PROJECTED ITERATIONS: 0 TO 0
PROJECTED ANSWERS: 0 TO 0

L6 0 SEA SSS SAM L5

=>
Uploading 924709c.str

L7 STRUCTURE UPLOADED

=> d 17
L7 HAS NO ANSWERS
L7 STR



G1 O,N

G2 CH₂,O,S,N

G3 C,Cy

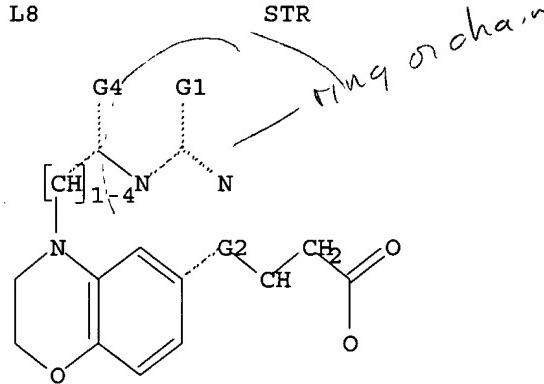
G4 H,O

Structure attributes must be viewed using STN Express query preparation.

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 Uploading 924709b.str

L8 STRUCTURE UPLOADED

=> d 18
 L8 HAS NO ANSWERS
 L8 STR



G1 O,N

G2 CH₂,O,S,N

G3 C,Cy

G4 H,O

Structure attributes must be viewed using STN Express query preparation.

=>
 Uploading 924709a.str

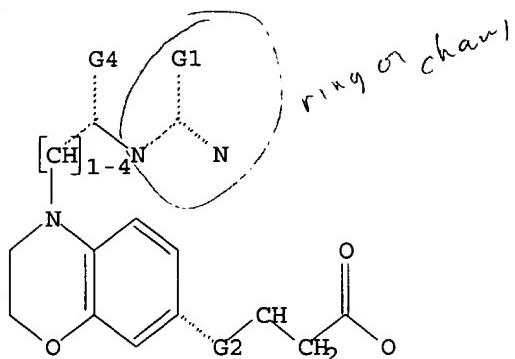
L9 STRUCTURE UPLOADED

=> d 19
 L9 HAS NO ANSWERS

09/744,603

L9

STR



G1 O,N

G2 CH₂,O,S,N

G3 C,Cy

G4 H,O

Structure attributes must be viewed using STN Express query preparation.

=> s 18

SAMPLE SEARCH INITIATED 18:30:59 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 0 TO ITERATE

100.0% PROCESSED 0 ITERATIONS
SEARCH TIME: 00.00.01

0 ANSWERS

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 0 TO 0
PROJECTED ANSWERS: 0 TO 0

L10 0 SEA SSS SAM L8

=> s 19

SAMPLE SEARCH INITIATED 18:31:04 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 0 TO ITERATE

100.0% PROCESSED 0 ITERATIONS
SEARCH TIME: 00.00.01

0 ANSWERS

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 0 TO 0
PROJECTED ANSWERS: 0 TO 0

L11 0 SEA SSS SAM L9

=> s 110

SAMPLE SEARCH INITIATED 18:31:08 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 0 TO ITERATE

100.0% PROCESSED 0 ITERATIONS
SEARCH TIME: 00.00.01

0 ANSWERS

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**

09/744,603

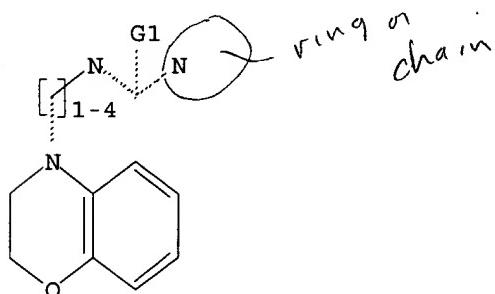
PROJECTED ITERATIONS: 0 TO 0
PROJECTED ANSWERS: 0 TO 0

L12 0 SEA SSS SAM L8

=>
Uploading 924709c.str

L13 STRUCTURE UPLOADED

=> d 113
L13 HAS NO ANSWERS
L13 STR



G1 O,N
G2 CH₂,O,S,N
G3 C,Cy
G4 H,O

Structure attributes must be viewed using STN Express query preparation.

=> s 113
SAMPLE SEARCH INITIATED 18:34:31 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 4 TO ITERATE

100.0% PROCESSED 4 ITERATIONS 0 ANSWERS
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 4 TO 200
PROJECTED ANSWERS: 0 TO 0

L14 0 SEA SSS SAM L13

=> s 113 sss full
FULL SEARCH INITIATED 18:34:45 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 46 TO ITERATE

100.0% PROCESSED 46 ITERATIONS 2 ANSWERS
SEARCH TIME: 00.00.02

L15 2 SEA SSS FUL L13

=> file caplus
COST IN U.S. DOLLARS SINCE FILE TOTAL
ENTRY SESSION

09/744,603

FULL ESTIMATED COST 148.26 148.47

FILE 'CPLUS' ENTERED AT 18:34:56 ON 04 NOV 2002
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FILE COVERS 1907 - 4 Nov 2002 VOL 137 ISS 19
FILE LAST UPDATED: 3 Nov 2002 (20021103/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

CAS roles have been modified effective December 16, 2001. Please check your SDI profiles to see if they need to be revised. For information on CAS roles, enter HELP ROLES at an arrow prompt or use the CAS Roles thesaurus (/RL field) in this file.

=> s 115
L16 2 L15

=> d 116 1-2 ibib abs hitstr

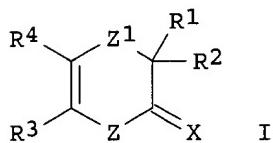
L16 ANSWER 1 OF 2 CPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1999:640847 CPLUS
DOCUMENT NUMBER: 131:257572
TITLE: Preparation of benzoxazinones and -thiazinones as serine protease inhibitors
INVENTOR(S): Berryman, Kent Alan; Downing, Dennis Michael; Dudley, Danette Andrea; Edmunds, Jeremy John; Narasimhan, Lakshmi Sourirajan; Rapundalo, Stephen Taras
PATENT ASSIGNEE(S): Warner-Lambert Company, USA
SOURCE: PCT Int. Appl., 175 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9950257	A1	19991007	WO 1998-US26708	19981215
W:	AL, AU, BA, BB, BG, BR, CA, CN, CU, CZ, EE, GE, HR, HU, ID, IL, IS, JP, KP, KR, LC, LK, LR, LT, LV, MG, MK, MN, MX, NO, NZ, PL, RO, SG, SI, SK, SL, TR, TT, UA, US, UZ, VN, YU, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
CA 2319551	AA	19991007	CA 1998-2319551	19981215
AU 9919183	A1	19991018	AU 1999-19183	19981215

BR 9815784	A	20001121	BR 1998-15784	19981215
EP 1068191	A1	20010117	EP 1998-963965	19981215
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
JP 2002509925	T2	20020402	JP 2000-541161	19981215
ZA 9902445	A	19991001	ZA 1999-2445	19990330
NO 2000004698	A	20000920	NO 2000-4698	20000920
PRIORITY APPLN. INFO.:			US 1998-80142P	P 19980331
			WO 1998-US26708	W 19981215

OTHER SOURCE(S): MARPAT 131:257572

GI



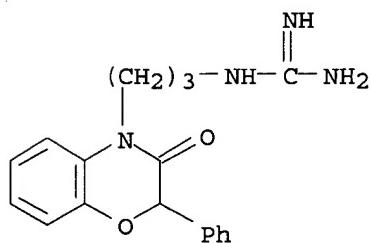
AB Title compds. [I; R1 = cycloalkyl(alkyl), heterocyclyl(alkyl), aryl(alkyl), etc.; R2 = H or alkyl; R3R4 = (un)substituted CH:CHCH:CH, -N:CHCH:CH, -CH:NCH:CH, etc.; X = O, S, NH; Z = Z2Z3R5; R5 = H, (un)substituted (heteroatom-interrupted) alkyl or -cycloalkyl(alkyl); Z1 = O, SOO-2, OCH2, SCH2, etc.; Z2 = bond or (heteroatom-interrupted) (cyclo)alkylene; Z3 = bond, (un)substituted heterocyclylene, -arylene] were prep'd. Thus, 4-(MeO)C6H4CH2CO2Me was .alpha.-brominated and the product etherified by 2-(O2N)C6H4OH to give, after reductive cyclization, I [R1 = C6H4(OMe)-4, R2 = H, R3R4 = CH:CHCH:CH, X = Z1 = O] (II; Z = NH) which was N-alkylated by Br(CH2)Br and the product aminated by cis-2,6-dimethylpiperidine to give II [Z = N(CH2)5R5, R5 = cis-2,6-dimethyl-1-piperidinyl]. Data for biol. activity of I were given.

IT 244620-11-9P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of benzoxazinones and -thiazinones as serine protease inhibitors)

RN 244620-11-9 CAPLUS

CN Guanidine, [3-(2,3-dihydro-3-oxo-2-phenyl-4H-1,4-benzoxazin-4-yl)propyl]- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

DOCUMENT NUMBER: 59:35587
 ORIGINAL REFERENCE NO.: 59:6389e-h,6390a-h,6391a
 TITLE: Development of psychotropic substances. III.
 Diphenylamine derivatives with pyridyl and guanidyl side chains
 AUTHOR(S): Thiel, M.; Stach, K.
 CORPORATE SOURCE: Firma C. F. Boehringer Soehne G.m.b.H.,
 Mannheim-Waldhof, Germany
 SOURCE: Monatsh. (1962), 93, 1080-9
 DOCUMENT TYPE: Journal
 LANGUAGE: Unavailable
 GI For diagram(s), see printed CA Issue.
 AB cf. CA 58, 5679a. The syntheses of aminopyridyl and guanidyl derivs. of carbazole, phenothiazine, phenoxyazine, and iminodibenzyl are reported. 3-(9-Carbazolyl)propionic acid (I) (100 g.) in 300 cc. CHCl₃ refluxed 3 hrs. with 35 cc. SOCl₂ and evapd. yielded 102 g. chloride (II) of I, m. 127-30.degree.. 3-(10-Phenothiazinyl)propionic acid (III) in 50 cc. CHCl₃ treated dropwise with stirring with 4.6 cc. (COCl)₂ in 50 cc. CHCl₃, refluxed 3 hrs., and evapd. yielded 12.7 g. chloride (IV) of III, m. 120-2.degree. (Et₂O). 5-(2-Cyanoethyl)iminodibenzyl (V) (26 g.), 8.4 g. NaOH, 220 cc. MeOH, and 30 cc. H₂O refluxed 24 hrs., dild. with 1.5 l. H₂O, filtered, adjusted (2N HCl) to pH 3, and filtered off gave 21 g. CO₂H analog (VI) of V, m. 148-9.degree.. VI (8.7 g.) and 7.8 g. SOCl₂ in 175 cc. CH₂Cl₂ refluxed 3 hrs. gave 9 g. chloride (VII) of 3-(10,11-dihydro-5H-dibenzo[b,e]-5-azepinyl)propionic acid (VIII), slowly crystg. oil. The appropriate aminopyridine (0.1 mole), 0.12 mole Et₃N, and 75 cc. C₆H₆ refluxed 1 hr. with a suitable acid chloride and dild. with H₂O, and the C₆H₆ phase worked up gave the corresponding pyridylamide (% yield and m.p. given): 3-pyridylamide of III, 78, 161-2.degree. (MeOH); 4-pyridylamide of III, 68, 164-5.degree. (EtOAc); 2-pyridylamide of III, 41, 144.degree. (C₆H₆-petr. ether); 2-pyridylamide of I, 60, 177-8.degree. (C₆H₆); 3-pyridylamide of I, 69, 193-5.degree. (iso-PrOH); 4-pyridylamide of I, 30, 137.degree. (C₆H₆); 2-pyridylamide of VIII, 45, 144-5.degree. (iso-PrOH-petr. ether). The appropriate pyridylamide (0.1 mole) in 150-200 cc. tetrahydrofuran refluxed 1 hr. with 0.1 mole LiAlH₄ in 80 cc. tetrahydrofuran yielded the corresponding substituted propylaminopyridines (IX) (method A). The appropriate 3-substituted propylamine (0.1 mole) and 0.15 mole 4-phenoxyppyridine heated 3 hrs. at 180-200.degree., cooled, dissolved in H₂O, treated with 2N NaOH, and extd. with CH₂Cl₂ gave the corresponding IX, (method B). By these methods were prep'd. the following compds. which, dissolved in Et₂O or dioxane and neutralized with HCl in Et₂O or dioxane, gave the HCl salts (method used, % yield, and m.ps. of base and HCl salt given): 2-[3-(9-carbazolyl)propyl aminopyridine (X), A, 98-9.degree., -; 3-isomer of X, A, 74, 144-5.degree. (MeOH), -; 4-isomer of X, A, 61, 179-80.degree. (C₆H₆), -; 2-[3-(10-phenothiazinyl)propylamino]pyridine (XI), A, 88, 98-9.degree. (MeOH), 172.degree. (dioxane); 3-isomer of XI, A, 68, 106-7.degree. (EtOAc), 155-6.degree. (EtOH-Et₂O); 4-isomer (XII) of XI, A, 60 (B, 65), 166-7.degree. (EtOAc), 190.degree. (dioxane); 4-[3-(10-phenoxyazinyl)propylamino]pyridine, B, 61, -; 231-3.degree. (iso-PrOH); 2-[3-(10,11-dihydro-4H-dibenzo[b,e]-5-azepinyl)propyl]pyridine (XIII), A, 49, 74-5.degree. (C₆H₆-petr. ether); 4-isomer of XIII, B, 55, 160-1.degree. (MeOH), -. 3-(10-Phenothiazinyl)propylamine (XIV) (10 g.), 20 g. 2-chloropyridine, and 6 g. Na₂CO₃ refluxed 6 hrs., filtered, and evapd., the residue shaken with H₂O and Et₂O, and the Et₂O phase worked up yielded 4.4 g. XI, m. 98-9.degree. (MeOH). NaNH₂ (3 g.), 7 g. 2-aminopyridine, and 70 cc. MePh refluxed 2 hrs., treated with 17 g. 3-(10-phenothiazinyl)propyl chloride, refluxed 3 hrs., and decompd. with H₂O, the MePh layer evapd., the residue dissolved in Et₂O and neutralized with HCl-Et₂O, and the ppt. dissolved in a little H₂O, treated with solid Na₂CO₃, and extd. with Et₂O gave 3 g. XI, m. 98-9.degree.. A 3-substituted propyl chloride (0.1 mole) and 0.1 mole 2-aminopyridine

heated 3 hrs. with stirring at 120.degree. and cooled yielded the corresponding XV. The appropriate 3-substituted propyl chloride (0.1 mole) and 0.1 mole 4-aminopyridine in 300 cc. EtAc or Et₂CO refluxed 16 hrs. with stirring gave the corresponding XV. By these methods were prep'd. the following XV (X, position of the NH₂ group in the pyridine ring, % yield, and m.p. given): 9-carbazolyl, 2, 41, 125-7.degree. (EtOH-EtOAc); 9-carbazolyl, 4, 53, 268.degree. (EtOH-EtAc); 10-phenothiazinyl, 2, 60, 185-7.degree. (H₂O); 10-phenothiazinyl, 4, 67, 197-8.degree. (EtOH-EtOAc); 10-phenoxazinyl, 2, 22, 248-50.degree. (PrOH); 10-phenoxazinyl, 4, 59, 228-30.degree. (EtOH-EtAc); 10,11 dihydro-5H-dibenzo[b,e]-5-azepinyl, 2, 24, 178-9.degree. (MeOH-EtAc); 10,11-dihydro-5H-dibenzo[b,e]-5-azepinyl, 4, 51, 160-1.degree. (MeOH-EtOAc). 4-Dimethylaminopyridine (6 g.), 14 g. 10-(3-chloropropyl)phenothiazine, and 70 cc. EtAc refluxed 24 hrs., cooled, and filtered off gave 12.4 g. 1-[3-(10-phenothiazinyl)propyl]-4-dimethylaminopyridinium chloride, 0.5 H₂O, m. 171-2.degree.. 9-(3-Aminopropyl)carbazole (20 g.) and 9 g. EtNCS in 100 cc. C₆H₆ refluxed 8 hrs. and refrigerated yielded 18 g. N-[3-(9-carbazolyl)propyl]-N'-ethylthiourea (XVI), m. 82-4.degree. (MeOH). XVI (9 g.) in 23 cc. EtOH refluxed 2 hrs. with 3.4 g. EtBr and evapd., and the residue repptd. from EtOH with EtOAc yielded 11.4 g. S-ethyl-N-[3-(9-carbazolyl)propyl]-N'-ethylisothiourea-HBr (XVII.HBr), m. 106-8.degree.. 9-(3-Aminopropyl)carbazole (10 g.) and 5.7 g. BuNCS gave similarly 17 g. N'-Bu analog (XVIII) of XVI, m. 107-8.degree.. XVIII(15 g.) in 50 cc. MeOH refluxed 4 hrs. with stirring with 4.6 cc. Me₂SO₄ and evapd., the residue shaken with 2N NaOH and CHCl₃, and the residue (XVIIIa) from the CHCl₃ phase dissolved in Et₂O and treated with (CO₂H)₂ in Et₂O gave 17 g. oxalate of the N'-Bu analog of XVII, m. 155-7.degree. (EtOH). The appropriate 3-substituted propylamine (0.1 mole) and 0.2 mole guanidine rhodanide heated 2 hrs. at 170.degree., poured hot into boiling 20% aq. K₂CO₃, filtered off, the residue dissolved in dil. HCl, filtered, treated with aq. NaOAc, and again filtered off gave the corresponding X(CH₂)₃NRC(:NR')NHR'' (XIX) acetate, which suspended in a little EtOH and treated with the calcd. amt. alc. HCl gave the XIX.HCl (method A). 3-(10-Phenothiazinyl)propylamine (10 g.) and 10 g. [EtSC(NH₂)₂]Cl (XX) in 100 cc. MeOH refluxed until the MeSH evolution ceased, evapd., and the residue dissolved in H₂O and pptd. with aq. NaOAc gave 9.5g. XIX.AcOH (R, R'', R' = H), m. 255-60.degree. (MeOH) (method B), also obtained in 62% yield by method A and isolated as the HCl salt, m. 156-7.degree. (EtOH-Et₂O). XVIIIa (11 g.) stirred with 2N NaOH and extd. with CHCl₃, the residue from the ext. dissolved in 100 cc. EtOH, neutralized with alc. HCl, satd. with NH₃, heated 8 hrs. at 100.degree. in an autoclave and evapd., the residue shaken with H₂O and Et₂O, and the aq. phase evapd. yielded 1 g. 9-(3-butylguanidylpropyl)carbazole-HCl, m. 156-8.degree. (iso-PrOH) (method C). XIV (17.2 g.) and 24 g. 2-methylthio-.DELTA.2-imidazoline-HI in 250 cc. abs. EtOH refluxed 6 hrs. (MESH evolved), concd., and shaken with H₂O and Et₂O, the aq. and oily layers basified and extd. with C₆H₆, and the residue from the ext. triturated with EtOAc yielded 16.5 g. 2-[3-(10-phenothiazinyl)propylamino]-.DELTA.2-imidazoline, m. 118-20.degree.. 10-(3-Methylaminopropyl)phenothiazine (XXI) (23 g.) and 16.1 g. XX in 70 cc. EtOH refluxed 6 hrs. and evapd., the residue dissolved in H₂O, basified, and extd. with C₆H₆, and the residue from the ext. neutralized with alc. HCl and dild. to turbidity with EtOAc gave 8 g. N1-methyl-N1-[3-(10-phenothiazinyl)propyl]guanidine-HCl, m. 135-7.degree. (EtOH-EtOAc). Similarly were prep'd. the following XIX (X, R, R', R'', method used, % yield, salt-forming acid, and m.p. of salt given): 9-carbazolyl, H, H, H, A, 58, HCl, 129-31.degree. (EtOH-EtOAc); 9-carbazolyl, H, H, NH₃, B, 52, HBr, 160-1.degree. (PrOH); 9-carbazolyl, H, Et, NH₂, C, 44, HBr, 160.degree. (MeOH-EtOAc); 10-phenoxazinyl, H, H, H, A, 36, HCl, 136-8.degree. (H₂O); 10-phenothiazinyl, H, H, NH₂, B, 53, HBr, 122-4.degree. (iso-PrOH); 10,11-dihydro-5H-dibenzo[b,e]-5-azepinyl, H, H, H, A, 72, AcOH, 133-5.degree. (H₂O); 10,11-dihydro-5H-dibenzo[b,e]-5-

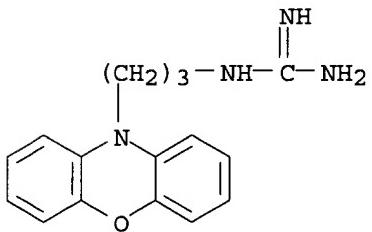
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azepinyl, H, H, NH₂, B, 50, HBr, 163-4.degree. (PrOH).
10-(3-Chloropropyl)phenothiazine (27 g.) in 300 cc. MeOH satd. with MeNH₂,
heated 5 hrs. at 100.degree. in an autoclave, and evapd., and the residue
treated with NaOH and extd. with Et₂O yielded 23 g. XXI, b0.2
180-5.degree..

IT 98111-67-2, Guanidine, (3-phenoxazin-10-ylpropyl)-, hydrochloride
(prepn. of)

RN 98111-67-2 CAPLUS

CN Guanidine, (3-phenoxazin-10-ylpropyl)-, hydrochloride (7CI) (CA INDEX
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●x HCl

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